

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

All claims currently being amended are shown with deleted text struckthrough or double bracketed and new text underlined. Additionally, the status of each claim is indicated in parenthetical expression following the claim number.

Claims 1-32 remain in this application.

Claims 1-32 are being amended.

New Claims 33-44 are being added.

CLAIMS:

1. (Currently Amended) ~~[[D]]~~ A dispensing apparatus ~~[[(2)]]~~ for use in dispensing a fluid lining material onto one or more interior wall surfaces of a conduit, said dispensing apparatus ~~[[(2)]]~~ including comprising:

at least one reservoir for the containment of at least one fluid~~[[,]]~~;

a dispensing outlet means communicating with said at least one reservoir for dispensing fluid therefrom; and

a rotational head member for directing the dispensed fluid from the dispensing outlet means ~~[[(6)]]~~ in a required direction onto substantially towards the walls of said conduit~~[[,]]~~; and

a reciprocating member, operatively coupled to said rotational head member, for reciprocating said rotational head member;

wherein said rotational head member including comprises:

at least one recess or cavity portion therein into which the dispensing outlet means substantially dispenses the fluid; and

at least one opening communicating with said recess ~~or cavity portion~~ through which the fluid travels to be dispensed from said head member[[,]]; wherein said opening of said rotational head member substantially facing faces the dispensing apparatus; ~~and said rotational head member;~~ and

~~capable of undergoing reciprocal motion relative to a further part of the apparatus in use;~~ at least one directional member provided substantially in [[the]] said at least one recess, ~~portion (24)~~ substantially opposite said outlet means, such that fluid being dispensed from said outlet means impacts an outer surface of said directional member in use; and [[,]] ~~characterized in that wherein~~ the at least one directional member ~~is in the form of~~ comprises a truncated cone [[(34)]].

2. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 characterised in that wherein at least one ~~shaft (10) or arm member connects~~ operatively couples the rotational head member [[(8)]] to the dispensing apparatus.
3. (Currently Amended) [[D]] The dispensing apparatus according to claim 2 ~~claims 1 and 2 characterised in that wherein~~ the arm ~~or shaft~~ member is ~~connected to or is located through~~ operatively coupled to the truncated portion of the cone [[(34)]].
4. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein ~~characterised in that~~ the side walls [[(38)]] of the directional member diverge outwardly in a direction away from the dispensing outlet means.
5. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein ~~characterised in that~~ the side walls of the recess portion diverge outwardly in a direction opposite to the side walls of the directional member.
6. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein ~~characterised in that~~ the outer side walls [[(38)]] of the directional member are substantially ~~planar or straight~~.

7. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein said at least one fluid and a second characterised in that two or more fluid[[s]] are mixed substantially within the dispensing outlet means [[(6)]] prior to being dispensed onto said directional member.
8. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein characterised in that the directional member is substantially integrally formed with said head member to provide a substantially continuous surface along which the fluid flows from the outer side walls of the directional member to the inner side walls of the recessed portion [[(24)]].
9. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein characterised in that the rotational head member [[(8)]] ~~is in the form of~~ comprises a cup with side walls, a first closed end [[(26)]] and a second open end [[(30)]], the at least one recess portion [[(24)]] being substantially defined between the side walls, the first closed end and the second open end.
10. (Currently Amended) [[D]] The dispensing apparatus according to claim 9 wherein characterised in that the width of the side walls of the head member [[(8)]] ~~is greater~~ adjacent to said first closed end [[(26)]] is greater than the width of the side walls of the head member relative to a free end (40) adjacent the second open end [[(30)]].
11. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein characterised in that the fluid is dispensed from the apparatus during a single pass of the apparatus [[(2)]] through the conduit.
12. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein characterised in that the reciprocal motion is in a direction longitudinally of substantially parallel to a path traveled by the apparatus [[(2)]].
13. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein characterised in that the apparatus is manually pulled through a conduit in use ~~manually or via manually activated means~~.

14. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 further comprising ~~characterised in that~~ a drive means (12) ~~are~~ provided to drive movement of the apparatus through a conduit in use.

15. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein said reciprocating member comprises a component chosen from the group consisting of: ~~characterised in that means to allow reciprocation of the rotational head member (8) includes any or any combination of one or more hydraulic pistons, pneumatic pistons, ball reverser~~ ~~[[or]]~~ and mechanical components such as a crank shaft.

16. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 ~~characterised in that~~ wherein the dispensing outlet means ~~[[(6)]]~~ is in the form of comprises a housing having at least two inlets (14, 16), an outlet ~~[[(20)]]~~ and at least one mixing compartment ~~[[(18)]]~~ located substantially between said inlets and outlet.

17. (Currently Amended) [[D]] The dispensing apparatus according to claim 16 wherein the diameter in that the dimensions of the mixing compartment (18) and/or outlet (20) are is less than the dimensions diameter of each of the at least two inlets (14, 16).

18. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein ~~characterised in that~~ the dispensing outlet means (6) ~~has~~ comprises at least one channel provided with a closure means at operatively coupled to an open end thereof said one channel.

19. (Currently Amended) [[D]] The dispensing apparatus according to ~~any preceding claim 1~~ wherein ~~characterised in that~~ the fluid dispensed from said apparatus has a curing time which is only slightly greater than the time taken for the component fluids to be mixed, dispensed onto the rotational head member and deflected therefrom but is less than the time taken for the rotational head member to complete a single reciprocating movement.

20. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein ~~characterised in that~~ the fluid being dispensed ~~includes~~ comprises an amine and an aromatic isocyanate.

21. (Currently Amended) ~~[[D]]~~ The dispensing apparatus according to claim 1 wherein characterised in that the fluid being dispensed from the apparatus has a curing time of substantially less than 10 seconds.

22. (Currently Amended) ~~[[D]]~~ The dispensing apparatus according to claim 1 wherein characterised in that the fluid being dispensed from the apparatus has a curing time of approximately 3 seconds.

23. (Currently Amended) ~~[[D]]~~ The dispensing apparatus according to claim 1 further comprising characterised in that control means operatively coupled to are provided on or associated with the apparatus to control any or any combination of the an element selected from the group consisting of: rotational speed of the rotational head member, reciprocating speed of the rotational head member, the temperature of the one or more fluids, and~~[[/or]]~~ the pressure of the fluid delivery of the one or more fluids in the apparatus.

24. (Currently Amended) ~~[[D]]~~ The dispensing apparatus according to claim 1 wherein characterised in that the dispensing outlet means ~~[[6]]~~ is a spaced distance apart from the rotational head member ~~[[8]]~~ such that dispensed fluid ~~has to~~ moves through free space prior to impacting a portion of the head member.

25. (Currently Amended) ~~[[D]]~~ The dispensing apparatus according to claim 1 further comprising a characterised in that drive means, (12) are provided operatively coupled to the rotational head member, to drive rotation of the head member ~~[[8]]~~.

26. (Currently Amended) ~~[[D]]~~ The dispensing apparatus according to claim 25 wherein characterised in that the drive means ~~[[12]]~~ for rotating the head member ~~[[8]]~~ also drives the reciprocating member motion of the head member ~~[[8]]~~ relative to a further portion of the apparatus.

27. (Currently Amended) ~~[[D]]~~ The dispensing apparatus according to claim 25 further comprises characterised in that the drive means for rotating the head member are separate to the

a second drive means, operatively coupled to the reciprocating member, for driving the reciprocating reciprocation of the head member.

28. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein characterised in that the rotational head member [[(8)]] is rotated at approximately 15,000 RPM.

29. (Currently Amended) [[D]] The dispensing apparatus according to claim 1 wherein characterised in that the directional member extends beyond the opening of the head member [[(8)]].

30. (Currently Amended) A rotational head member [[(8)]] for use with a fluid dispensing apparatus according to any preceding claim, that dispenses a fluid lining material onto one or more interior wall surfaces of a conduit;

wherein said dispensing apparatus comprises a dispensing outlet means, communicating with at least one reservoir, for dispensing fluid therefrom;

wherein said rotational head member, operatively coupled to said dispensing apparatus, directs the dispensed fluid from the dispensing outlet means substantially towards the walls of said conduit;

wherein said rotational head member comprises:

at least one recess into which the dispensing outlet means substantially dispenses the fluid;

at least one opening communicating with said recess through which the fluid travels to be dispensed from said head member; wherein said opening of said rotational head member substantially faces the dispensing apparatus; and

at least one directional member provided substantially in said at least one recess, substantially opposite said outlet means, such that fluid being dispensed from said outlet means impacts an outer surface of said directional member in use; and the at least one

directional member comprises a truncated cone; and

further wherein said dispensing apparatus further comprises a reciprocating member, operatively coupled to said rotational head member, for reciprocating said rotational head member.

31. (Currently Amended) ~~[[D]]~~ A dispensing outlet means ~~[[(6)]]~~ for use with a fluid dispensing apparatus according to any preceding claim that dispenses a fluid lining material onto one or more interior wall surfaces of a conduit,

wherein said dispensing apparatus comprises at least one reservoir for the containment of at least one fluid;

wherein said dispensing outlet means is operatively coupled with said at least one reservoir for dispensing fluid therefrom; and

further wherein a rotational head member, operatively coupled to said dispensing apparatus, directs the dispensed fluid from the dispensing outlet means substantially towards the walls of said conduit;

further wherein said rotational head member comprises:

at least one recess into which the dispensing outlet means substantially dispenses the fluid;

at least one opening communicating with said recess through which the fluid travels to be dispensed from said head member; wherein said opening of said rotational head member substantially faces the dispensing apparatus; and

at least one directional member provided substantially in said at least one recess, substantially opposite said outlet means, such that fluid being dispensed from said outlet means impacts an outer surface of said directional member in use; and the at least one directional member comprises a truncated cone; and

further wherein said dispensing apparatus further comprises a reciprocating member, operatively coupled to said rotational head member, for reciprocating said rotational head member.

32. (Currently Amended) A method of applying a fluid onto a surface of a conduit using a dispensing apparatus ~~[[2)]~~, said method comprising including the steps of:

mixing two or more component fluids substantially in a dispensing outlet means; ~~[[6),]]~~

dispensing said mixed fluids substantially in at least one recess portion of a rotational head member;

~~and~~ deflecting said mixed fluids substantially through at least one opening, defined substantially in said rotational head member, onto the conduit surface, said at least one opening communicating with said recess portion; ~~[[,]]~~ wherein the opening of said rotational head member substantially faces facing the dispensing apparatus; and

reciprocating the rotational head member; ~~caused to undergo reciprocal motion relative to a further part of the apparatus in use,~~

wherein at least one directional member is provided substantially in the at least one recess portion ~~[[24)]~~ substantially opposite said outlet means, such that fluid being dispensed from said outlet means impacts an outer surface of said directional member in use; ~~[[,]]~~ characterised in that

wherein the at least one directional member ~~is in the form of~~ comprises a truncated cone ~~[[34)]~~.

33. (New) The dispensing apparatus according to claim 1 wherein the apparatus is pulled through a conduit in use via manually activated means.

34. (New) The dispensing apparatus according to claim 16 wherein the diameter of the outlet is less than the diameter of each of the at least two inlets.

35. (New) The ~~dispensing apparatus~~rotational head member according to claim 30 wherein the side walls of the recess portion diverge outwardly in a direction opposite to the side walls of the directional member.

36. (New) The ~~dispensing apparatus~~rotational head member according to claim 30 wherein the directional member is substantially integrally formed with said head member to provide a substantially continuous surface along which the fluid flows from the outer side walls of the directional member to the inner side walls of the recessed portion ~~[[24]]~~.

37. (New) The ~~dispensing apparatus~~rotational head member according to claim 30 wherein the rotational head member comprises a cup with side walls, a first closed end and a second open end, the at least one recess portion being substantially defined between the side walls, the first closed end and the second open end.

38. (New) The ~~dispensing apparatus~~rotational head member according to claim 30 wherein the width of the side walls of the head member adjacent to said first closed end is greater than the width of the side walls of the head member adjacent the second open end.

39. (New) The ~~dispensing apparatus~~outlet means according to claim 31 wherein said at least one fluid and a second fluid are mixed substantially within the dispensing outlet means prior to being dispensed onto said directional member.

40. (New) The ~~dispensing apparatus~~outlet means according to claim 31 ~~the dispensing outlet means is in the form of~~comprises a housing having at least two inlets, an outlet and at least one mixing compartment located substantially between said inlets and outlet.

41. (New) The ~~dispensing apparatus~~outlet means according to claim ~~[[31]]~~40 wherein the diameter of the mixing compartment is less than the diameter of each of the at least two inlets.

42. (New) The ~~dispensing apparatus~~outlet means according to claim ~~[[31]]~~40 wherein the diameter of the outlet is less than the diameter of each of the at least two inlets.

43. (New) The dispensing ~~apparatus~~outlet means according to claim 31 wherein the dispensing outlet means ~~has~~comprises at least one channel provided with a closure means ~~at~~ operatively coupled to an open end thereof.

44. (New) The dispensing ~~apparatus~~outlet means according to claim 31 wherein the dispensing outlet means is a spaced distance apart from the rotational head member such that dispensed fluid ~~has to~~ moves through free space prior to impacting a portion of the head member.